Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended) A method for creating a plurality of arrays from a numbered list data set, the method comprising:

installing a program on a computer;

wherein the program performs steps comprising:

obtaining a numbered list data set comprising a plurality of numbered lists, each of the plurality of numbered lists comprising a plurality of numbers separated by a decimal;

assigning an ID to [[a]] the numbered list;

creating the plurality of arrays;

performing a Boolean OR operation on the ID and an array value;

determining whether a number of the plurality of numbers is a wildcard;

responsive to a first determination that the number is the wildcard, translating the ID for the numbered list containing the number into the binary ID;

responsive to the first determination that the number is the wildcard, translating a plurality of the array values for the array associated with the number into a plurality of the binary array values;

responsive to a second determination that the number is not the wildcard, translating the ID for the numbered list containing the number into a binary ID; and

responsive to the second determination that the number is not the wildcard, translating the array value with an index equal to the number for the array associated with the number into a binary array value; and

wherein the computer can determine whether an incoming numbered list is present in the numbered list data set by analyzing the arrays;

wherein the computer is a firewall;

wherein the IDs are sequentially increasing powers of two;

wherein the quantity of arrays equals the quantity of numbers in the numbered lists; and

wherein the arrays are MAXV fields long, MAXV being the maximum value of any number in the numbered lists or the incoming numbered list.

2-8.   (Cancelled)

9.   (Currently amended) The method of claim][[7]] 1 wherein the program performs steps further comprising:

translating the binary array value into a hexadecimal array value or a decimal array value.

10.   (Currently amended) A method for determining whether an incoming numbered list is present in a numbered list data set, the method comprising:

installing a program on a computer;

wherein the program performs steps comprising:

obtaining the incoming numbered list; and

obtaining a plurality of numbered list data set arrays;

determining whether a number is the first number in the incoming numbered list;

responsive to [[the]] a first determination that the number is the first number in the incoming numbered list, setting a counter equal to an array value with an index equal to the number;

setting the counter equal to the result;

determining whether the counter is equal to zero; and

responsive to a second determination that the counter is equal to zero, indicating that the incoming numbered list is not present in the numbered list data set;

responsive to a third determination that the counter is not equal to zero, indicating that the incoming numbered list is present in the numbered list data set;

responsive to a fourth determination that the number is not the first number in the incoming numbered list, performing steps comprising:

translating the counter into a binary counter;

translating the array value with the index equal to the number into a binary array value;

translating the result into a hexadecimal result or a decimal result;

determining whether the number is a wildcard;

responsive to a fifth determination that the number is a wildcard, performing a Boolean OR operation between the counter and a value equal to sum of a plurality of IDs for the numbered lists in the numbered list data set;

wherein the computer can determine whether the incoming numbered list is present in the numbered list data set by analyzing the counter;

wherein the computer is a firewall;

wherein the incoming numbered list comprises a plurality of the numbers separated by decimals;

wherein the quantity of ones present in the binary counter indicates a first location of a match between the incoming numbered list and the numbered list data set; and

wherein a second location of ones present in the binary version of the counter indicates the number of times the incoming numbered list is present in the numbered list data set.

11-42. (Cancelled)

43.   (Currently amended) ~~An apparatus~~ A <u>method</u> for determining whether an incoming numbered list is present in a numbered list data set, the ~~apparatus~~ comprising:

~~means for~~ obtaining the numbered list data set comprising a plurality of numbered lists;

wherein the numbered lists comprise a plurality of numbers separated by decimals;

~~means for~~ assigning a plurality of IDs to the numbered lists;

wherein the IDs are sequentially increasing powers of two;

~~means for~~ creating a plurality of arrays;

wherein the quantity of arrays equals the quantity of numbers in the numbered lists;

wherein the arrays are MAXV fields long, MAXV being the maximum value of any number in the numbered lists or an incoming numbered list;

~~means for~~ determining whether one of the numbers is a wildcard;

responsive to the determination that the number is the wildcard, ~~means for~~ translating the ID for the numbered list containing the number into a binary ID;

responsive to the determination that the number is the wildcard, ~~means for~~ translating a plurality of array values for the array associated with the number into a plurality of binary array values;

responsive to the determination that the number is not the wildcard, ~~means for~~ translating the ID for the numbered list containing the number into the binary ID;

responsive to the determination that the number is not the wildcard, ~~means for~~ translating the array value with an index equal to the number for the array associated with the number into the binary array value;

~~means for~~ performing a Boolean OR operation on the ID and the array value;

~~means for~~ translating the binary array values into a hexadecimal array value or a decimal array value;

~~means for~~ obtaining the incoming numbered list;

wherein the incoming numbered list comprises the plurality of numbers separated by decimals;

~~means for~~ determining whether a number is the first number in the incoming numbered list;

responsive to the determination that the number is the first number in the incoming numbered list, means for setting a counter equal to the array value with the index equal to the number;

responsive to the determination that the number is not the first number in the incoming numbered list, the ~~apparatus~~ method further comprises:

~~means for~~ obtaining the array value with the index equal to the number;

~~means for~~ translating the counter and the array value with the index equal to the number into binary numbers;

~~means for~~ performing a Boolean AND operation to generate a result;

~~means for~~ translating the result into a hexadecimal result or a decimal result;

~~means for~~ setting the counter equal to the result;

~~means for~~ determining whether the counter is equal to zero;

responsive to the determination that the counter is equal to zero, ~~means for~~ indicating that the numbered list is not present in the numbered list data set;

responsive to the determination that the counter is not equal to zero, ~~means for~~ indicating that the numbered list is present in the numbered list data set;

~~means for~~ determining whether the number is the wildcard;

responsive to the determination that the number is the wildcard, ~~means for~~ performing the Boolean OR operation between the counter and a value equal to sum of the IDs for the numbered lists in the numbered list data set;

wherein the computer is a firewall;

wherein the quantity of ones present in the binary counter indicates the location of the match between the incoming numbered list and the numbered list data set; and

wherein the location of ones present in the binary counter indicates the number of times the incoming numbered list is present in the numbered list data set.

44.   (New) A computer implemented method for filtering data packets through a firewall to reduce a number of computation steps required to determine whether an incoming numbered list is present in a numbered list data set when the incoming numbered list contains a wildcard character, the computer implemented method comprising:

obtaining the incoming numbered list;

assigning an ID to the incoming numbered list;

creating a list of indexes and a number of arrays, the number of arrays equal to a quantity of numbers in the incoming numbered list;

for each array, determining whether a number in the numbered list is a wildcard;

when a number in the number list is a wildcard, performing a Boolean OR operation on the ID and an on every array value; and translating the ID for the numbered list containing the number into a binary ID and translating a plurality of array values for an array associated with the number into a plurality of binary array values;

when a number in the numbered list is not a wildcard, performing a Boolean OR operation on the ID and only on an array value with an index equal to the number; and

wherein a computer reduces the number of computations required to determine when an incoming numbered list containing a wildcard is present in the numbered list data set by analyzing the number of arrays.

45.   (New) A method for creating a plurality of arrays from a numbered list data set, the method comprising:

    obtaining a numbered list data set containing a plurality of numbered lists;

    assigning an ID to a numbered list;

    creating the plurality of arrays;

    performing a Boolean OR operation on the ID and an array value;

    determining whether one of the numbers is a wildcard; and

    responsive to the determination that the number is the wildcard, translating the ID for the numbered list containing the number into the binary ID and translating a plurality of the array values for the array associated with the number into a plurality of the binary array values;

    wherein the computer can determine whether an incoming numbered list is present in the numbered list data set by analyzing the arrays.